

WHAT IS CLAIMED IS:

1. An image sensing apparatus comprising:

an image sensor;

a storage area adapted to store a signal contained
5 in at least two frames;

a controller adapted to control an operation of
writing a signal contained in at least two frames, which
is generated by said image sensor, into said storage
area; and

10 a correction unit adapted to correct a signal of
an object image photographed by said image sensor, on
the basis of the signal stored in said storage area.

2. The apparatus according to claim 1, wherein if an
operation of writing a signal generated by said image
15 sensor into said storage area is being executed when
photographing of an object image is designated, said
controller makes photographing of the object image
possible against the writing operation.

3. The apparatus according to claim 1, wherein
20 whenever writing a signal of one frame generated by said
image sensor into said storage area, said controller
switches storage areas into which the signal is to be
written.

4. The apparatus according to claim 1, wherein said
25 image sensor comprises a shutter on an optical path for
guiding light to said image sensor, a signal to be
stored in said storage area is generated by said image

sensor when said shutter is kept closed, and the object image is photographed when said shutter is opened.

5 5. The apparatus according to claim 1, wherein said controller writes signals generated by said image sensor into said storage area in turn at a predetermined time interval in a photographing preparation state.

10 6. The apparatus according to claim 1, wherein said controller writes signals generated by said image sensor into said storage area in turn at a predetermined time interval.

7. The apparatus according to claim 1, wherein said correction unit subtracts a signal stored in said storage area from a signal of an object image photographed by said image sensor.

15 8. The apparatus according to claim 1, wherein said controller allows storage of a signal of an object image photographed by said image sensor into said storage area in continuous photographing.

20 9. The apparatus according to claim 1, wherein said controller allows storage of a signal of an object image photographed by said image sensor into said storage area.

10. The apparatus according to claim 1, wherein a signal generated by said image sensor contains a dark current noise component.

25 11. The apparatus according to claim 10, wherein said controller has a function of controlling the time of

0399374 07101
101120-421000

storage of electric charge to said image sensor during which a dark current noise component is acquired.

12. The apparatus according to claim 11, wherein said correction unit corrects a signal of an object image

5 photographed by said image sensor, on the basis of a noise component stored in said storage area and the time of storage of electric charge to said image sensor during which the noise component is acquired.

13. An information processing apparatus which
10 processes information provided by an image sensing apparatus, comprising:

a storage unit adapted to store a first signal generated by an image sensor, wherein the first signal is a signal for correcting a second signal generated
15 when said image sensor photographs an object; and

a control unit adapted to give priority to designation of photographing of an object image over an operation of writing the first signal generated by said image sensor into said storage unit.

20 14. The apparatus according to claim 13, wherein said storage unit stores a signal contained in at least two frames, which is generated by said image sensor.

15. The apparatus according to claim 13, wherein said image sensing apparatus comprises a shutter on an
25 optical path for guiding light to said image sensor, the first signal is generated by said image sensor when said shutter is kept closed, and the second signal is

generated by said image sensor when said shutter is opened.

16. The apparatus according to claim 13, wherein said control unit controls an operation of storing the first
5 signal into said storage unit at a predetermined time interval in a photographing preparation state.

17. The apparatus according to claim 13, wherein said control unit controls an operation of storing the first
10 signal into said storage unit at a predetermined time interval.

18. The apparatus according to claim 13, further comprising a correction unit adapted to correct the second signal, generated when said image sensor photographs an object, by using the first signal.

15 19. The apparatus according to claim 13, wherein said control unit stores the second signal photographed by said image sensor into said storage area in continuous photographing.

20 20. The apparatus according to claim 13, wherein said control unit stores the second signal photographed by said image sensor into said storage area.

21. The apparatus according to claim 13, wherein the first signal generated by said image sensor contains a dark current noise component.

25 22. The apparatus according to claim 21, wherein said control unit has a function of controlling the time of

storage of electric charge to said image sensor during which a dark current noise component is acquired.

23. The apparatus according to claim 22, wherein said control unit corrects the second signal in connection
5 with the time of storage of electric charge to said image sensor during which a dark current noise component is acquired.

24. An information processing apparatus which processes information provided by an image sensing
10 apparatus, comprising:

an acquisition unit adapted to acquire a signal generated by an image sensor;

a storage unit adapted to store a first signal generated by said image sensor, wherein the first signal
15 is a signal for correcting a second signal generated when said image sensor photographs an object; and

a control unit adapted to give priority to designation of photographing of an object image over an operation of acquiring the first signal generated by
20 said image sensor.

25. The apparatus according to claim 24, wherein said storage unit stores a signal contained in at least two frames, which is generated by said image sensor.

26. The apparatus according to claim 24, wherein said
25 image sensing apparatus comprises a shutter on an optical path for guiding light to said image sensor, the first signal is generated by said image sensor when said

09903174-01101
101120-478060

shutter is kept closed, and the second signal is generated by said image sensor when said shutter is opened.

27. The apparatus according to claim 24, wherein said
5 control unit controls an operation of storing the first signal into said storage unit at a predetermined time interval in a photographing preparation state.
28. The apparatus according to claim 24, wherein said
10 control unit controls an operation of storing the first signal into said storage unit at a predetermined time interval.
29. The apparatus according to claim 24, further comprising a correction unit adapted to correct the second signal, generated when said image sensor
15 photographs an object, by using the first signal.
30. The apparatus according to claim 24, wherein said control unit stores the second signal photographed by said image sensor into said storage area in continuous photographing.
- 20 31. The apparatus according to claim 24, wherein said control unit stores the second signal photographed by said image sensor into said storage area.
32. The apparatus according to claim 24, wherein the first signal generated by said image sensor contains a
25 dark current noise component.
33. The apparatus according to claim 32, wherein said control unit has a function of controlling the time of

storage of electric charge to said image sensor during which a dark current noise component is acquired.

34. The apparatus according to claim 33, wherein said control unit corrects the second signal in connection

5 with the time of storage of electric charge to said image sensor during which a dark current noise component is acquired.

35. A method of controlling an image sensing apparatus having an image sensor, comprising:

10 securing a storage area for storing a signal contained in at least two frames, and controlling an operation of writing a signal contained in at least two frames, which is generated by the image sensor, into the storage area; and

15 correcting a signal of an object image photographed by the image sensor, on the basis of the signal stored in the storage area.

36. A method of controlling an image sensing apparatus having an image sensor, comprising:

20 storing a first signal generated by the image sensor, wherein the first signal is a signal for correcting a second signal generated when the image sensor photographs an object; and

giving priority to designation of photographing of
25 an object image over an operation of writing the first signal generated by the image sensor into the storage area.

37. A method of controlling an image sensing apparatus having an image sensor, comprising:

acquiring a signal generated by the image sensor;

storing a first signal generated by the image

5 sensor, wherein the first signal is a signal for correcting a second signal generated when the image sensor photographs an object; and

giving priority to designation of photographing of an object image over an operation of acquiring the first
10 signal generated by the image sensor.

38. A memory medium storing a control program of an image sensing apparatus having an image sensor, the control program comprising:

securing a storage area for storing a signal

15 contained in at least two frames, and controlling an operation of writing a signal contained in at least two frames, which is generated by the image sensor, into the storage area; and

correcting a signal of an object image

20 photographed by the image sensor, on the basis of the signal stored in the storage area.

39. A memory medium storing a control program of an image sensing apparatus having an image sensor, the control program comprising:

25 storing a first signal generated by the image sensor, wherein the first signal is a signal for

